Here's a comprehensive skill tree for Computer Science & Engineering (CSE) students, mapped to different career paths.

Career Path	Core Skills	Programming Languages	Tools & Technologies	Additional Skills
Software Development	Data Structures & Algorithms, OOP, System Design	C++, Java, Python	Git, Docker, Kubernetes, AWS, CI/CD	Problem Solving, Code Optimization
Web Development	HTML, CSS, JavaScript, RESTful APIs, Security	JavaScript, TypeScript, Python, PHP	React.js, Node.js, Express, Next.js, Django	UX/UI Principles, DevOps Basics
Mobile App Development	UI/UX, APIs, Performance Optimization	Java, Kotlin (Android), Swift (iOS), Flutter, React Native	Android Studio, Xcode, Firebase	Cross-Platform Development
Data Science & AI	Probability, Statistics, ML/DL, Data Engineering	Python, R, SQL	Pandas, NumPy, TensorFlow, PyTorch, Tableau	Data Wrangling, Cloud ML Services
Cybersecurity	Network Security, Cryptography, Ethical Hacking	Python, C, Assembly	Wireshark, Metasploit, Burp Suite, Kali Linux	Risk Assessment, Compliance (ISO, GDPR)
Cloud & DevOps	CI/CD, Infrastructure as Code (IaC), Containerization	Python, Bash, Go	AWS, Azure, Docker, Kubernetes, Terraform	System Administration, Automation
Blockchain Developer	Smart Contracts, Cryptography, DLTs	Solidity, Rust, Go	Ethereum, Hyperledger, Truffle, Hardhat	Tokenomics, Consensus Mechanisms
Game Development	Game Physics, AI, Graphics Rendering	C++, C#, Python	Unity, Unreal Engine, OpenGL, Blender	Game Monetization, Animation
Embedded Systems & IoT	Microcontrollers, RTOS, Sensors & Actuators	C, C++, Python	Arduino, Raspberry Pi, MQTT, Zephyr	Low-Power Design, Edge Computing
AR/VR Developer	3D Rendering, Computer Vision, Haptics	C#, C++, Python	Unity, Unreal Engine, Vuforia, OpenXR	Spatial Computing, UX Research